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HERTFORDSHIRE COUNTY COUNCIL.

ANNUAL REPORT

ON

SCHOOL HEALTH

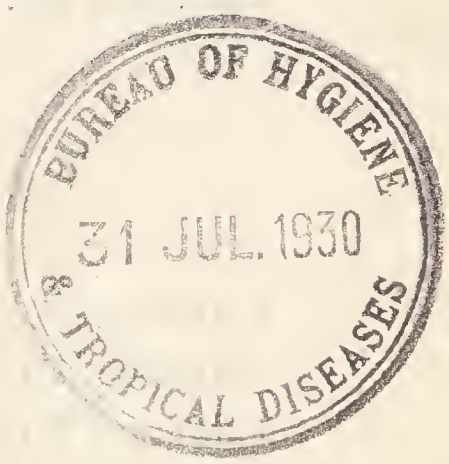
(TWENTY-SECOND)

CONCERNING PUBLIC ELEMENTARY SCHOOLS IN

HERTFORDSHIRE

RELATING TO THE YEAR

1929



BY

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M.D., D.P.H.,

School Medical Officer and County Medical Officer of Health.

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MEDICAL INSPECTION STAFF.

School Medical Officer.

H. HYSLOP THOMSON, M.D., D.P.H.

County Medical Office, Hertford.

Assistant School Medical Officers.

* **BALLANCE, A. C., B.Ch.** ... *Westfield, Hatfield.*	Hatfield Rural.
BARKER, A., B.Ch., *Manor House, Much Hadham.*	Sawbridgeworth Urban and Hadham Rural (part of).§
BUCHANAN, J., M.B. ... ... *20, Station Road, Watford.*	Watford Borough (part of).†
* **CLARKE, A. E., M.D., M.R.C.S.** *Rickmansworth.*	Rickmansworth Urban.
* **COX, W. J., M.B., D.P.H.** ... *Municipal Offices, Watford.*	Watford Borough (part of).¶
* **DUNN, R. A., M.D., D.Hy.** ... *The Cedars, Bengeo, Hertford.*	Bishop's Stortford, Hertford, Hoddesdon and Ware Urban, and Hertford and Ware Rural (part of).‖
* **FRASER, H., M.B., C.M.** ... *Harpenden.*	Harpenden Urban.
GRATTAN, H. W., M.R.C.S., F.R.C.P., D.P.H. *Bridge Road, Welwyn Garden City.*	Welwyn Garden City Urban and Welwyn Rural.
GROSS, MALCOM, M.B., D.P.H. *Town Hall Hemel Hempstead.*	Berkhampstead and Tring Urban, Berkhampstead and Hemel Hempstead Rural.
* **GROSVENOR, A. A., M.D.** ... *Stevenage.*	Stevenage Urban.
* **HARDIE, C. F., M.A., M.B., L.R.C.P.** *Highfield, Wood Street, Barnet.*	Barnet Urban and Barnet Rural.
* **HARVEY, W., M.D., D.P.H.,** *Council Offices, Bushey.*	Bushey and Chorleywood Urban, Watford Rural.
HINE, A. L., L.R.C.P., M.R.C.S., *Kirkwick Avenue, Harpenden.*	National Children's Home School.
* **MACFADYEN, N., M.B.,** *Letchworth.* **M.R.C.S., D.P.H.**	Hitchin, Letchworth and Royston Urban, Ashwell and Hitchin Rural.
* **McCLYMONT, J., M.D.** ... *Enfield.*	Cheshunt Urban.
* **PATON, R. R. K., M.B., Ch.B., D.P.H.** *The Gables, New House Park Gardens, St. Albans.*	St. Albans City and Rural.
* **ROSE, A., M.A., M.B., Ch.B.** ... *Cranbourne House, Station Road, New Barnet.*	East Barnet Valley Urban.
* **SUGGIT, B., M.B., C.H.B.** ... *Baldock.*	Baldock Urban.
WIGFIELD, F. P., M.B., B.S. *Puckeridge.*	Buntingford, Hadham (part of)§ and Ware Rural (part of).‖

SCHOOL-NURSING STAFF.

FOUR HEALTH VISITORS and SCHOOL NURSES.

88 NURSES of Local Nursing Associations.

* Medical Officer of Health.

† Alexandra, Callow Land, St. Andrew's, and Victoria C.C. Schools.

§ High Wych, Allen's Green, and Thorley under Dr. Barker, rest of Hadham R.D. under Dr. Wigfield.

‖ Great Munden, Little Munden, Puckeridge C.E., Puckeridge R.C., and Standon under Dr. Wigfield, rest of Ware R.D. under Dr. Dunn.

¶ Beechen Grove C.C., Central C.C., Chater C.C., Parkgate Road C.C., Field C.C., Holy Roo R.C., Oxhey C.C., and Defective Schools.

Annual Report on School Health.

Chapter I.—ADMINISTRATION.

The following Report, which is the twenty-second of its series, gives particulars of the work of School Medical Inspection and of the treatment of defects in school children carried out during the year.

In the following tables particulars are given of the work of the respective Assistant School Medical Officers during the year.

In Table I particulars are given regarding the population and the average number of children on the books in the Urban and Rural Districts. The estimated population for the county for 1929 was 384,100, compared with 378,200 for 1928, and the average number of children on the books 41,800, compared with 41,700 for the previous year.

Table II gives information regarding the actual number of inspections and visits to schools made by the Assistant School Medical Officers during the year. If the various columns are referred to it will be seen that for the most part visits and inspections in excess of what is actually required have been made indicating that the work of school medical inspection has been carried out in an efficient manner during the year.

TABLE I.—Areas of Assistant School Medical Officers.

Districts.	Acreage.	Estimated Population, 1929.	Average Number of Children on Books.	Assistant School Medical Officer.
Urban.				
1 Baldock . .	362	3,017	350	Suggit, B.
2 Barnet . .	3,114	14,220	1,543	Hardie, C. F.
3 Berkhampstead .	1,208	7,747	804	Gross, M.
4 Bishop's Stortford	3,371	9,730	973	Dunn, R. D.
5 Bushey . .	3,081	10,260	871	Harvey, W.
6 Cheshunt . .	8,479	14,540	2,030	McClymont, J.
7 Chorleywood .	1,989	3,192	190	Harvey, W.
8 East Barnet Valley	2,644	16,060	1,546	Rose, A.
9 Harpenden .	1,633	8,001	862	Fraser, H.
10 Hemel Hempstead	7,184	15,070	—	Hine, A. L.
11 Hertford . .	1,501	11,770	1,347	Dunn, R. A.
12 Hitchin . .	3,675	13,710	1,627	Macfadyen, N.
13 Hoddesdon .	1,576	5,630	866	Dunn, R. A.
14 Letchworth. .	3,652	13,200	1,820	Macfadyen, N.
15 Rickmansworth .	2,790	9,686	974	Clarke, A. E.
16 Royston . .	1,003	3,828	427	Macfadyen, N.
17 St. Albans . .	2,703	27,610	3,208	Paton, R. R. K.
18 Sawbridgeworth .	2,678	2,579	414	Barker, A.
19 Stevenage . .	4,545	5,657	570	Grosvenor, A. A.
20 Tring . .	4,407	4,220	502	Gross, M.
21 Ware . . .	629	6,229	931	Dunn, R. A.
22 Watford . .	2,238	54,670	6,362	Buchanan, J. Cox, W. J.
23 Welwyn Garden City		8,074	938	Grattan, H. W.
Total Urban .	64,462	268,700	29,155	
Rural.				
1 Ashwell . .	22,049	3,529	394	Macfadyen, N.
2 Barnet . .	9,216	5,497	571	Hardie, C. F.
3 Berkhampstead .	18,383	5,088	599	Gross, M.
4 Buntingford .	28,470	4,785	635	Wigfield, F. P.
5 Hadham . .	25,468	5,417	646	,, ,, Barker, A.
6 Hatfield . .	23,486	10,310	1,389	Ballance, A. C.
7 Hemel Hempstead	19,994	7,965	1,025	Gross, M.
8 Hertford . .	33,468	7,523	947	Dunn, R. A.
9 Hitchin . .	55,174	14,320	1,985	Macfadyen, N.
10 St. Albans . .	37,066	18,290	1,500	Paton, R. R. K.
11 Ware . . .	33,953	11,710	1,373	Dunn, R. A. Wigfield, F. P.
12 Watford . .	26,854	17,470	1,166	Harvey, W.
13 Welwyn . .	6,480	3,496	415	Grattan, H. W.
Total Rural .	340,061	115,400	12,645	
Total for County	404,523	384,100	41,800	

TABLE II.—Medical Inspection and Visits, 1929.

	(1) Number of Schools.	(2) Average number of Children on Books.	(3) Estimated number of Inspections required.	(4) Actual number of Inspections made.	(5) Minimum number of School-visits required, one per term.	(6) Number of School-visits paid.
Dr. Ballance . .	10	1,389	427	478	30	40
Dr. Barker . .	6	561	173	213	18	16
Dr. Buchanan .	4	3,179	978	1,087	12	61
Dr. Clarke . .	4	974	300	228	12	10
Dr. Cox . .	8	3,183	979	1,022	24	48
Dr. Dunn . .	45	6,138	1,889	1,863	135	144
Dr. Fraser . .	3	681	209	189	9	14
Dr. Grattan . .	7	1,353	416	551	21	56
Dr. Gross . .	23	3,056	940	972	69	83
Dr. Grosvenor .	2	570	175	203	6	12
Dr. Hardie . .	10	2,114	650	800	30	60
Dr. Harvey . .	15	2,227	685	835	45	41
Dr. Hine . .	1	181	56	72	3	3
Dr. Macfadyen .	46	6,253	1,924	1,831	138	171
Dr. McClymont .	10	2,030	625	707	30	34
Dr. Paton . .	23	4,582	1,410	1,467	69	120
Dr. Rose . .	6	1,546	476	540	18	23
Dr. Suggit . .	2	350	108	109	6	8
Dr. Wigfield .	22	1,433	441	527	66	75
Totals .	247	41,800	12,861	13,694	741	1,019

The children detailed for inspection during 1929 were :—

(*a*) those newly admitted to school life,
(*b*) those born in the year 1921,
(*c*) those born in the year 1917,
(*d*) those not previously inspected and known to be about to leave school.

TABLE III.—Inspections, Refusals, and Presence of Parents, 1929

Sex.	District.	Inspections.			Total.	Refusals.	Percentage.	Parents present.	Percentage.*
		Entrants.	Born in 1921.	Born in 1917 and Leavers.					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Boys	Urban . .	1752	1848	1152	4752	—	—	899	50·7
	Rural . .	716	882	588	2186	—	—	230	32·1
	Urban and Rural	2468	2730	1740	6938	—	—	1129	45·7
Girls	Urban . .	1616	1854	1172	4642	—	—	854	52·8
	Rural . .	739	852	523	2114	—	—	236	31·9
	Urban and Rural	2355	2706	1695	6756	—	—	1090	46·3
Boys and Girls	Urban . .	3368	3702	2324	9394	—	—	1753	52·0
	Rural . .	1455	1734	1111	4300	—	—	466	32·0
	Urban and Rural	4823	5436	3435	13694	—	—	2219	46·0

* Percentage of parents present at first inspections.

Table III gives the number of children examined in the various age groups. These groups are entrants, children 8 years of age, children 12 years of age, and leavers who were not previously examined at the age of 12. There were no refusals during the year, as compared with 4 last year. The percentage of parents present at the medical inspections was 46·0 compared with 46·3 last year.

Chapter II.—REPORTS OF ASSISTANT SCHOOL MEDICAL OFFICERS.

One of the duties of the Assistant School Medical Officers is to submit at the end of each year a report dealing with the work of School Medical Inspection in the schools in their districts during the previous twelve months. In these reports reference is made to various aspects of the work of School Medical Inspection, which are of interest and value in relation to the administration of the scheme. In the present chapter extracts from the reports received from the Assistant School Medical Officers are given.

Dr. Rose (East Barnet).

Of the total number examined in all schools, throat defects, e.g. tonsils and adenoids with cervical adenitis, are present in about 23 per cent. Parents are now realizing the great advantage of the operative treatment of enlarged tonsils and adenoids. The dental clinic in East Barnet is proving an immense boon. There is not the slightest doubt, in my opinion, that the health of the school children in this district is markedly and steadily improving.

Dr. Dunn (Hertford).

The usual routine inspections have been carried out. The total number of children examined was nearly 400 less than in the previous year; this is the lowest number since 1924. In connection with this it will be recalled that the year 1917 had an extremely low birth rate.

School closure has only been found necessary in the case of three of my schools, namely, Tonwell in February for influenza, and Ware and Hunsdon in the autumn for scarlet fever. A considerable number of certificates were issued owing to attendances falling below 60 per cent.

The following up of defects by the nurses continues to be satisfactory; most of the defects noted were referred for treatment. Many doctors still apply through the school nurses for the M.T. 1 forms for tonsillectomy. Unless it is reported that the case is one of urgency I make a point of seeing the patient myself before issuing a certificate, and I must admit I do not always agree as to its necessity.

Dr. Macfayden (Letchworth).

The work of the year has again shown steady improvement. The condition of the children as regards nutrition and cleanliness is remarkable as compared with ten years ago. The dental treatment is beginning to show results, and the work of the Medical Inspector has been made easier by the readiness of the parents to attend inspections and the school clinics and to seek advice.

Dr. Cox (Watford).

The Medical Officer of Health of the Borough of Watford is responsible for the medical inspection of the following schools:—

Chater, Field, Parkgate Road, Holy Rood Roman Catholic, Beechen Grove Boys, Higher Elementary and Beechen Grove Special, and the following report therefore relates chiefly to these schools.

The children of these school constitute about half the total number in the elementary schools of the Borough, the remaining schools in the town being dealt with by Dr. Buchanan.

In all, 1,022 children were examined in the course of routine inspection. Of these 1,022 children, 380 (or 37 per cent.) were found to be suffering from defects which required medical treatment. Altogether the 380 children were suffering from 460 defects, as it is quite common for one child to have two conditions which require treatment, e.g. enlarged tonsils and carious teeth.

The usual epidemics have gone their round of the schools as in previous years. Scarlet fever and diphtheria have been prevalent during the year in the town and district generally, but it cannot be said that either of these diseases has centered around any particular school during 1929, with one exception, where several cases of diphtheria occurred at one school during a period of four weeks in the spring. Generally speaking, however, the cases of diphtheria and scarlet fever occurred here and there in various schools at various intervals. In addition to the usual precautions of isolation of cases (generally in hospital), disinfection of homes and exclusion of contacts from school, it was considered advisable to disinfect classrooms in which cases had occurred at the schools.

The method of disinfection was by spraying the walls of classrooms with formalin solution. This measure in itself may seem almost superfluous when it is considered that the walls are composed of somewhat impervious material—generally cement or glazed bricks—and are therefore not much liable to

carry infection. When it is considered, however, that this method of disinfection is followed up by the school caretaker, who is provided with carbolic soap for cleansing purposes, the whole process of disinfection and cleansing should have definite value as a safeguard against infection, especially if the premises are well flushed with fresh air after these operations.

In addition, the parents feel reassured that something has been done to counteract infection. Owing to a considerable prevalence of infectious diseases during the year, it was found necessary to disinfect classrooms on 105 occasions, entailing a considerable amount of work on the part of the sanitary staff.

The Beechen Grove Special School is an excellent institution which has carried on its work during the past year with the usual success. The football team has acquitted itself very well in matches with other schools and in the summer the garden has provided healthy occupation combined with valuable manual training. Much individual care and attention has been given to the children in the school with very good results. During the last year one boy in particular showed such promise in pianoforte playing and singing that the Herts County Council have awarded him a bursary of £10 per term at Watford School of Music in order to continue his studies. During the previous year another boy obtained an open scholarship in Art, and is now doing well. These successes speak for themselves, and show that the school is more than justifying its existence.

Dr. Paton (St. Albans).

With reference to the City Schools, Dr. Paton reports that only 23 per cent. of the children newly admitted are vaccinated. Chicken pox has been the principal epidemic disease during 1929, and appears to pass in cycles through the three wards of the city. Scarlet fever has been more prevalent, but has not assumed epidemic incidence. Improvements have been carried out at Hatfield Road playground.

There is a marked improvement in the cleanliness of the children attending the Rural District Schools with one exception, and here the trouble is mainly due to the occupants of one house. From time to time children from this home have been excluded from school on account of verminous heads, and the parents have been to court at the instance of the Attendance Officer on, I think, three occasions. The parents will not, however, maintain the heads of their children in a clean condition.

Dr. Suggitt (Baldock).

My report on the health of the Baldock Schools for the year 1929 is as follows:—

Eight visits were paid to the two elementary schools and 108 children were medically examined.

Forty-two parents were present at the inspections.

Sixty-three children were unvaccinated.

There appear to have been no exclusions during the year. The C. of E. Infants' School was closed for three weeks from 12th November owing to measles.

A certificate for epidemic sickness was given for Pond Lane School for a period of two weeks from 23rd October on account of measles.

Attendance was good for these schools, as Baldock held first place for the first quarter and third for the second quarter of the year in the whole of the county and was placed third for the third quarter amongst the Urban Districts in the County.

The sanitation of the schools is satisfactory.

As regards the heating of the C. of E. Infants' School, the average temperature for the winter is 42 degrees Fahrenheit in the morning and 48 in the afternoon. This is too cold, especially for infants. A " Tortoise " stove at the west end of the schoolroom with the pipe carried up inside to the roof similar to the one at the east end of the room would meet the case.

Dr. Buchanan (Watford).

The general improvement in the cleanliness and clothing of the children is maintained and is progressive. This outward improvement is an evidence of a higher standard of living and of a growing refinement in both parents and children. The children as a whole have an appearance of well-being which we associate with children of the middle class.

Great credit is due to the teachers for the encouragement they give to self-respect and good habits and for the high standard of personal hygiene which they set before the children.

There have been comparatively few cases of exclusion for verminous condition : a result largely due to the unremitting efforts of the School Sister.

During the past ten or twelve years there has been a remarkable diminution in the number of cases of rheumatic heart disease found in the course of inspection. It is interesting to note that this improvement accords with the unanimous opinions put forward by the various speakers at the Bath Conference on Rheumatism in 1928. The decrease in rheumatic complaints among children is, I consider, due to the fact that they are better fed and housed and that their clothing is more suitable for inclement weather. It is now quite common to

see the children on wet days going to school in mackintosh coats and boots.

Rules for the Preservation of Eyesight.

The seats should be so arranged that the main light falls over the left shoulder, or from the left side. Pupils should not face the source of light nor sit with their backs to it.

The window area should be one-fifth the area of the room floor.

Artificial light is not so good as daylight, it should be steady and not too near. The illumination should be good, a pupil should be able to read without strain diamond type at a distance of twelve inches (Strasburg test).

The paper should not be heavily glazed as the consequent dazzling leads on to astigmatism and short sight.

It is important that defective eyesight should be detected in its early stage. Some of the evidence which may lead teachers to suspect visual imperfection are :—

(1) Holding the book too near or too far from the eyes.
(2) Inability to read blackboard writing from the seats.
(3) Squinting.
(4) Shutting the eyelids to a chink.
(5) Blinking and winking.
(6) Frequent rubbing of the eyes.
(7) Redness of the eyes.
(8) Headaches aggravated by reading small print and for which no other cause can be found.

Dr. Wigfield (Puckeridge).

On the whole, the general health of the school children in the Buntingford and those areas of the Hadham and Ware districts for which I am responsible has been quite satisfactory.

Routine examinations were carried out upon 528 children in 1929, the defects revealed for which treatment was recommended numbering 181, or 34 per cent. This figure is below the county average in recent years, and is less significant than it appears since the bulk of the defects belonged to the usual tooth, tonsil and visual classes, and many of the two first named were cases in which similar action had been previously urged.

Among the defects, enlarged tonsils and adenoids again provided the largest proportion, the actual number being 128. Every school medical officer, and indeed every practitioner

is familiar with the difficulty frequently experienced in persuading some parents to submit their children to the operative treatment of this condition.

Cases of neglect have been rare. Four children from two families had to be excluded on account of vermin.

Infectious diseases have, I think, been less prevalent than usual. The re-opening of Much Hadham after the Christmas holidays was delayed by scarlet fever. Buntingford, Furneaux Pelham and Albury were closed for measles, and there was a limited though troublesome outbreak of diphtheria at Standon.

Dr. McClymont (Cheshunt).

During the year 1929 in the routine school medical examinations 712 children were examined; in these, 72 defects were discovered and the large number of 64 were reported as treated or remedied.

The year has been noteworthy for the absence of zymotic diseases; only 6 cases of diphtheria amongst school children were reported and not a single case of diphtheria has been reported in the district since May to the present date. Many of the cases of scarlet fever were so mild as to be difficult to diagnose.

The magnificent sunshine of the summer was beneficial generally to the children. The scheme of giving a small glass of milk to the children, tardy at its beginning, has now become general. There are too many fallacies possible to draw any certain deductions from the result of this extra milk ration. Seven children taking milk were weighed and the total gain in weight of these children was $32\frac{1}{2}$ lbs. Seven others of the same age and about the same total weight only gained $16\frac{3}{4}$ lbs. in the same time.

Dr. Balance (Hatfield).

The school inspections during the year have shown no particular incidence in any special disease or defect.

A large proportion of the defects were remedied. The admission of children to hospital for the removal of tonsils and adenoids generally met with the approval of the parents. The great majority of children were found to be clean and well dressed and exclusions for dirty heads, etc., were limited to about half a dozen families.

Dr. Gross (Hemel Hempstead).

Out of a total of 947 children examined at routine medical inspection 549 were found to have defects, and of these 185

had dental defects only. In other words it would appear that 38 per cent. of children examined had defects other than dental.

In spite of some exceptions, the standard of clothing and cleanliness of children appears to be well maintained. Parents' attention is directed to any deficiency either by myself or the Nurse.

There were 75 cases of heart affection found. Of these, 19 were cases of organic heart disease. That is to say roughly 75 per cent. of cases found were functional affections. In these latter cases medical attention was advised where considered necessary.

In cases of organic disease, parents are warned either by myself or by Nurse of its presence. Teachers are told of the inadvisability of such children participating in competitive games or swimming, and, where it is considered necessary, still further restrictions of activity are made.

Well marked cases of tonsils and adenoids are advised operation and where necessary certificates for the appropriate centre have been provided. This year has been rather remarkable for the number of cases where certificates have been issued at the request of the child's own doctor.

Scarlet Fever has been prevalent during the year throughout the whole district. The only schools not involved were Sebright, Markyate and Bourne End. Those most heavily involved were the Berkhamstead Urban Schools (53 cases among the school population) and the Tring Urban Schools (31 cases among the school population).

It may be noted that both in Berkhamstead and Tring nearly 40 per cent. of the total cases occurring in the districts during the year were *outside* the elementary school population.

Diphtheria was prevalent in the latter half of the year at Kings Langley schools and at Leverstock Green school.

Out of a total of 29 cases in Kings Langley, 14 cases were among Kings Langley Infants scholars and 8 cases among Kings Langley Mixed School scholars. The smartest outbreak occurred among Kings Langley Infants children between 12th and 25th July, when 8 cases were notified.

Eighteen cases occurred at Leverstock Green and, of these, 14 cases were among Leverstock Green School children in the last term.

Repeated investigations were made by me at these schools and resulted in discovery of 11 of the above cases.

In regard to the two above diseases, I think there is still considerable lack of appreciation of the value of careful super-

vision of children both in school and out of school. Instead of a concentration on the children's health and on the effective isolation of contacts there is a tendency to exaggerate the beneficial effects of school disinfection and school closure. Again school cleanliness is not accorded the importance which is attached to disinfection whereas it is of far greater value.

Dr. Grattan (Welwyn Garden City).

The population of Welwyn Garden City consists of a somewhat high proportion of children and young persons who are more susceptible to illness than older persons. In spite of this fact, the health of the pupils has been good and it has not been necessary to close any class in school in the district during the year on account of illness.

Influenza was prevalent at the beginning of the year and an outbreak of chicken pox occurred towards the close of the year.

At the beginning of the year the scholars of Peartree School were accommodated in temporary buildings. These were vacated when the new permanent school was opened in the spring. The improved facilities for the comfort of education and physical training of the pupils are much appreciated by all concerned.

As regards the schools in the Welwyn Rural District, the health of the pupils has been good. No cases of diphtheria were notified during the year and only three cases of scarlet fever. Influenza was prevalent at the beginning of the year and it was necessary to close Welwyn School on that account for eleven days in February. An outbreak of chicken pox occurred in the spring and the infants' classes at Welwyn and Woolmer Green Schools were closed for 12 days at the beginning of May.

The new building at Welwyn School was commenced last October and completed on 16th January, 1930. The accommodation includes a cooking centre, science laboratory, and wood and metal workshops. Various improvements at the Ayot St. Peters School have been carried out. A new cloakroom has been provided for the girls and more satisfactory arrangements made for the supply of drinking water.

Dr. Harvey (Bushey).

Routine medical inspections were made during the year in each school in the districts of Bushey, Chorleywood and Watford Rural. The response to recommendations for treatment was generally good, except in the case of an outbreak of ringworm

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of the hair and impetigo in one of the rural parishes when there was a general failure to appreciate the necessity for treatment.

Scarlet fever was prevalent in the districts with the exception of Chorleywood during the first quarter of the year. Sporadic cases of diphtheria occurred in two schools in the Abbots Langley parish in November and December.

The accommodation available for medical inspection is unsatisfactory in five schools, in these cases there was found to be an advantage in making the routine inspections during the summer months, when outdoor classes could be held and accommodation more easily arranged for the parents who attended to see the doctor.

It was often found during the year that the school towels were by no means clean. The school towel is an easy, and probably fairly common means by which infection is transferred from one scholar to another, and it is advisable that the danger from this source should be reduced to a minimum. It seems reasonable that a clean towel should be provided daily for each hand basin.

Dr. Hardy (Barnet).

The number of defects found have been considerably less, with the exception of teeth. A dental clinic has at last been established and will meet an urgent demand and should prove of great benefit to the children. The poorer classes have no opportunity of getting regular dental treatment; they cannot afford the usual dentist, and hospital treatment, except in a few cases, is not available.

In the early months of the year, influenza of a fairly severe type was very prevalent, and during the latter part of the year scarlet fever of a mild type, especially in Boreham Wood, was prevalent. The source of individual cases is very hard to trace, and probably arose from unseen and undiagnosed very mild cases. A very mild case of scarlet fever is very difficult indeed to diagnose and will, I fear, continue to be the cause of the trouble.

The number of eye cases was about the same. At Boreham Wood many children have light blue eyes and there were very few defects. Parents attend well and display great interest. The number of young "nervous" children is very large and shows no sign of lessening now that the "post-war" children are at school. Parents were apt to attribute "nerves" to air-raids and war conditions; I think, however, that present-day life, with its late hours, lack of parental control, evening entertainments, fewer hours for sleep, and overcrowding so that

children cannot get early to sleep, is even more harmful than the stress and privations of the war period.

Dr. Barker (Hadham).

Nothing of unusual importance has arisen in the course of the routine medical inspections at the schools in my area. One still meets an occasional ungrateful parent who resents advice. The Sawbridgeworth area needs a more accessible dental clinic in order to reap the fullest benefit.

I hope that in time it may be possible to adopt a standard report card for all counties and also to arrange a more rapid transfer of cards when a child changes its school. In this way we should get a more satisfactory and intelligent story.

Dr. Hine (Harpenden).

In his report on the National Children Homes School, Dr. Hine states that the school was visited and inspected on 18th March, 11th July, 13th September as well as on other occasions. The sanitary arrangements were satisfactory, ventilation good and the classrooms clean and tidy. Some of the School furniture is not up-to-date, but steps are being taken to make the school desks better suited to young children.

Fifteen children were examined in September, and one report on a mentally defective child was sent in. The School is free from infectious disease.

Chapter III.—PHYSICAL RECORDS AND DEFECTS.

The number of children inspected during 1929 was 13,694. compared with 15,812 for the previous year; this includes 162 special inspections. In addition, there were 196 re-inspections. The average number of children on the books was more than last year, being 41,800, compared with 41,700. The number of schools included in the scheme of inspection was 247, the same as last year. There has been no change in the system adopted for recording the results of inspection.

Table IV gives particulars of the inspections in relation to district and sex, and of the percentages of defects and directions given. Of the total number of children examined, defects

for which directions were given were found in 4,981, compared with 5,291, or 36·4 per cent., as against 33·5. The number of directions given with a view to the treatment or correction of minor ailments and defects was 6,790, compared with 7,442 last year.

Table V gives particulars of the various defects found in the course of the medical inspection of 13,694 children and of the numbers referred for treatment and requiring to be kept under

TABLE IV.—Defects and Directions, 1929.

Sex.	District.	Total Inspections.	Defects for which directions were given.			
			Number of children requiring Directions.	Percentage.	Number of Directions given.	Percentage.
Boys	Urban . . .	4752	1623	34·1	2148	45·2
	Rural . . .	2186	883	40·4	1255	57·4
	Urban and Rural .	6938	2506	36·1	3403	49·0
Girls	Urban . . .	4642	1590	34·2	2100	45·2
	Rural . . .	2114	885	41·9	1287	60·9
	Urban and Rural .	6756	2475	36·6	3387	50·1
Boys and Girls	Urban . . .	9394	3213	34·2	4248	45·2
	Rural . . .	4300	1768	41·1	2542	59·1
	Urban and Rural .	13694	*4981	36·4	*6790	49·6

* The difference between the two totals is due to more than one direction being given in the case of certain children.

observation. The defects for which treatment was most frequently required were dental disease, 22·6 per cent. compared with 20·3 per cent. last year; defective vision, 3·7 per cent. compared with 4·0 last year; enlarged tonsils, 8·0, the same as last year, non-tuberculous cervical glands, 3·1 per cent., the same as last year; and enlarged tonsils and adenoids, 4·5 per cent. compared with 4·1 per cent. last year.

TABLE V.—Return of Defects found in the course of the Medical Inspection of 13,694 children in 1929.

Defect or Disease.		Boys.		Girls.		Total.		Percentage.	
		Number referred for Treatment.	Number requiring to be kept under Observation.	Number referred for Treatment.	Number requiring to be kept under Observation.	Total numberreferred for Treatment.	Total number requiring to be kept under Observation.	Percentage referred for Treatment.	Percentage requiring to be kept unde Observation.
	Malnutrition	57	373	43	281	100	654	·7	4·8
	Uncleanliness—								
	Head	34	85	116	122	150	208	1·1	1·5
	Body	35	141	32	76	67	217	·5	1·6
Skin	Ringworm—								
	Head	2	1	2	—	4	1	·03	·01
	Body	—	—	—	—	—	—	—	—
	Scabies	3	1	3	3	6	4	·04	·03
	Impetigo	16	23	16	8	32	31	·2	·2
	Other Diseases	16	11	12	5	28	16	·2	·1
Eye	Blepharitis	19	14	22	24	41	38	·3	·3
	Conjunctivitis	5	8	6	7	11	15	·1	·1
	Keratitis	—	—	—	—	—	—	—	—
	Corneal Opacities	—	2	—	—	—	2	—	·01
	Defective Vision	245	206	268	232	513	438	3·7	3·2
	Squint	72	45	99	33	171	78	1·2	·6
	Other Conditions	3	9	6	12	9	21	·06	·1
Ear	Defective Hearing	13	39	17	31	30	70	·2	·5
	Otitis Media	11	15	13	9	24	24	·2	·2
	Other Ear Diseases	24	12	20	13	44	25	·3	·2
Nose and Throat	Enlarged Tonsils	528	815	570	808	1908	1623	8·0	11·8
	Adenoids	71	51	43	37	114	88	·8	·6
	Enlarged Tonsils and Adenoids	333	144	281	137	614	281	4·5	2·0
	Other Conditions	—	—	—	—	—	—	—	—
Enlarged Cervical Glands (non-tuberculous)		193	494	121	448	314	942	2·3	6·9
Defective Speech		13	33	4	19	17	52	·1	·4
Teeth—Dental Diseases		1547	1164	1551	1039	3098	2203	22·6	16·1
Heart and circulation	Heart Disease								
	Organic	3	19	2	29	4	48	·03	·3
	Functional	32	58	20	63	52	121	·4	·9
	Anæmia	18	28	14	19	32	47	·2	·3
Lungs	Bronchitis	3	11	3	16	6	27	·04	·2
	Other Non-Tuberculous Diseases	23	22	13	20	36	42	·3	·3
Tuberculosis	Pulmonary—								
	Definite	8	5	1	1	9	6	·06	·04
	Suspected	5	1	1	1	6	2	·04	·01
	Non-pulmonary—								
	Glands	2	10	1	4	3	14	·02	·1
	Spine	2	—	1	—	3	—	·02	—
	Hip	—	3	—	1	—	4	—	·03
	Other Bones and Joints	—	1	—	—	—	1	—	·01
	Skin	—	—	—	—	—	—	—	—
	Other Forms	—	—	—	—	—	—	—	—
Nervous System	Epilepsy	4	3	2	5	6	8	·04	·06
	Chorea	3	—	1	1	4	1	·03	·01
	Other Conditions	7	8	6	7	13	15	·1	·1
Rickets		3	26	1	4	4	30	·03	·2
Deformities		64	55	45	32	109	87	·8	·6
Thyroid Glands		1	—	6	4	7	4	·05	·03
Other Defects and Diseases		65	39	48	34	113	73	·8	·5

Closure of Schools.—Schools were closed on 57 occasions during 1929, compared with 35 occasions during 1928. The chief causes of school closure during 1929 were measles 12, compared with 14 occasions last year; whooping cough 5 occasions, the same as last year; influenza 24 occasions, compared with one occasion last year; diphtheria 3 occasions; and scarlet fever 7 occasions.

TABLE VI.—Closure of Schools during 1929.

	Reasons for Closure.								Total number of Closures for all reasons.
	Measles.	Scarlet Fever.	Whooping-cough.	Diphtheria.	Chicken-pox.	Influenza.	Mumps.	Other Causes.	
No. of Closures—									
Urban . .	2	1	2	—	—	4	—	—	9
Rural . . .	5	4	3*	2	2	19	—	3	38
No. of Re-closures—									
Urban . .	1	—	—	—	—	1	—	—	2
Rural . . .	4	2	—	1	1	—	—	—	8
Total : Urban .	3	1	2	—	—	5	—	—	11
Rural . . .	9	6	3	3	3	19	—	3	46
All in 1929 . .	12	7	5	3	3	24	—	3	57

* Includes 1 Whooping-cough and Chicken-pox.

In the memorandum referred to in last year's report, the Board of Education emphasizes the fact that "if during epidemics of infectious disease, the power to exclude individual children from school be used to the best advantage, it is only in special and quite exceptional circumstances that it will be necessary to close a school in the interests of public health." It is further pointed out that as a general rule and apart from exceptional circumstances, closure of the school is not justified unless all the following conditions are simultaneously present

(*a*) evidence pointing to the continued meeting of children in school as a source of infection ; (*b*) cases of infectious disease continuing to occur after every effort has been made to discover the infecting cause, and (*c*) good reason to expect that closure will considerably reduce the likelihood of exposure to infection.

With reference to certain infectious diseases, such as measles and whooping cough, the memorandum points out that while school attendance may be greatly lowered during the prevalence of such diseases, a large proportion of children have already contracted the disease or been exposed to infection and school closure will therefore do little to prevent further spread of the disease. The Code now provides that if the average attendance of a school is below a certain percentage of the number on the books owing to the prevalence of epidemic disease in the district, and if the school remains open the attendances need not be counted for the purpose of reckoning the average attendance on which the grant is paid.

Prevention of Infectious Disease.—The action to be taken in controling and preventing the spread of infectious disease in public elementary schools is now fairly well recognized. The view that immediate closure should be applied when infectious disease appears in a school is still held in some districts by correspondents and teachers, but it is obvious that in urban districts especially closure will not prevent the children of school age from coming in contact with each other while if the school is open the child will be under efficient care and observation.

The routine measures to be adopted in the prevention of infectious disease in schools are defined and discussed as follows: —

(1) Exclusion of suspected cases—any child who presents symptoms suggestive of any of the common infectious diseases or who appears to be or complains of being ill should immediately be excluded ; (2) the immediate contacts of any case of infectious disease should be excluded except in the case of certain disease of which the contact has previously had an attack. Teachers and parents should be encouraged to exclude all contacts and suspects. (3) The examination of the children of a class in which a case of infectious disease has occurred. In the case of diphtheria the nose and throat of doubtful cases should be swabbed. (4) Disinfection by spraying with formalin or izal and cleaning which includes the disinfections of books, pencils, pens, etc., and washing floors and woodwork with water containing some antiseptic. (5) Ventilation and suppression

of dust ; both are of special importance during the winter months.

Early recognition or at least suspicion of a case of infectious disease with immediate exclusion is the first essential step to take to prevent the spread of infection. To facillitate this, the following information regarding infectious diseases has been circulated in the schools.

Public Elementary Schools.

Infectious Diseases.

Infectious diseases occur as isolated cases or in epidemic form, the latter especially in schools, and to prevent their spread certain immediate steps must be taken. When a child has, or is suspected of having, any infectious disease the first and most important thing to do is to exclude the child from school, isolate at home, and *call in the doctor.* There are certain symptoms which should always be regarded with suspicion, and when they occur in a child a *doctor should always be called in by the parent.* These symptoms are sore throat, swelling of glands in neck, rash, sickness, fever.

Common Infectious Diseases.

Scarlet Fever.—Symptoms : Sickness, headache, sore throat, fever, flushed face ; rash on second day consists of scarlet rash, first on neck and chest. *Patient* should not return to school until two weeks after release from isolation ; there must be no discharge from nose or ears. *Contacts* excluded for one week after release from isolation. Early isolation.

Diphtheria.—Symptoms : Fever, headache, sore throat, swelling of neck, vomiting, some difficulty in swallowing, discharge from nose ; may be difficulty in breathing. Early treatment very important. *Patient* excluded two or three weeks after end of attack. *Contacts* excluded two weeks after isolation. Early isolation.

Measles.—Early symptoms like a cold, most infectious at this stage. Running of eyes and nose, redness of eyes, fever ; may be vomiting. Rash on third or fourth day, first on face. Chief complication bronchitis. *Patient* excluded for three weeks from date of appearance of rash. *Contacts* : Infants and children who have not had the disease excluded for three weeks from date of onset of last case in house. Early isolation, and keep child in bed.

GERMAN MEASLES.—Much milder than measles. Symptoms: slight fever, sore throat, enlarged and tender glands in neck, rash first day of illness. *Patient* excluded one week from date of appearance of rash. *Contacts*: Infants and other children who have not had the disease three weeks from date of last exposure to patient with rash.

WHOOPING COUGH.—Early symptoms like cold, running of eyes and nose, cough, slight fever; after a week cough becomes worse and develops "whoop". Complications, bronchitis, and pneumonia. *Patient* excluded for six weeks from commencement of cough. *Contacts*: Infants only, for six weeks from date of onset of last case or three weeks from last exposure to infection.

CHICKENPOX.—Slight fever and headache, but in majority of cases no symptoms before rash which appears first on the face; fresh crops appear for some days. *Patient* excluded for three weeks or until all scabs have disappeared. *Contacts*: Infants and other children who have not had the disease three weeks from date of last exposure to infection.

MUMPS.—Fever, headache, and sore throat in some cases; pain and swelling of glands below ear, first one side then the other, lasts for seven to ten days. *Patients* excluded until seven to ten days after all swelling has disappeared. *Contacts:* No exclusion.

Malnutrition.—The number of children in which some degree of malnutrition or impaired nutrition was found was 754, compared with 947 for 1928. Of the total number of children examined, in 0·7 per cent. malnutrition was sufficiently marked to necessitate the child being referred for treatment, compared with 0·9 last year, while in 4·8 per cent. there was a slight degree of malnutrition which necessitated the children being kept under observation, compared with 5·1 last year. From these figures it will be observed that improvement in the nutrition of school children has to be recorded during the year. Taken as a whole the nutrition of the children attending public elementary schools in the county has now reached a satisfactory standard and it is only occasionally that cases of malnutrition due to some definite disease or arising from neglect are observed; where neglect has obviously been the cause the services of inspectors of the Society of Prevention of Cruelty to Children have been secured with good results. During the year, milk clubs have been formed in quite a number of schools in the county, by means of

which milk is supplied to the children ; this will further improve the nutrition of the children. Reference should also be made to the improvement in the physique and poise of the children which results from physical training and organized games.

Cleanliness.—Of the total number of children examined 358 were referred for treatment or to be kept under observation for uncleanliness of the head, as compared with 438 for 1928. Of the total number of children examined, 1·1 per cent. were referred for treatment for this condition, compared with 1·2 last year. The number of children with uncleanliness of the body was 284, compared with 394 for 1928, a considerable decrease, while the percentage referred for treatment was 0·5 compared with 0·7 last year. These figures indicate a further definite improvement in the cleanliness of school children.

Scabies and Ringworm.—Ten cases of scabies have been reported during the year, compared with 13 last year, and of the number reported, 6 were referred for treatment and four to be kept under observation. Five cases of ringworm of the head were reported during the year, compared with eight last year. The percentage of children referred for treatment with ringworm of the head was 0·03, compared with 0·01 last year.

Defective Vision and Squint.—Some visual defect was found in 951 of the children examined, compared with 1226 during 1928. Of the total number of children examined 513, or 3·7 per cent., were referred for treatment, compared with 4·0 last year. The number of children with squint referred for treatment was 171, compared with 156, and the number of children with eye disease referred for treatment was ,61 compared with 100 last year.

Teeth.—Of the children examined, 5,301, or 38·7 per cent., were found to have some dental defect, compared with 6,154, or 38·9 per cent. last year. Of the total number of children examined 22·6 per cent. were referred for treatment, compared with 20·3 last year. During the year arrangements have been made to provide facilities for dental treatment in certain of the districts in which up to the present no such provision has been made.

Tuberculosis.—Fifteen cases of definite plumonary tuberculosis were recorded out of the total number of cases examined compared with 12 last year. Twenty-five cases of non-pulmonary tuberculosis were recorded amongst the children examined, compared with 20 last year.

Adenoids and Enlarged Tonsils.—Some enlargement of the tonsils was found in 2,721 cases, compared with 3,245 cases in 1928. For this condition 8·0 per cent. of the children examined were referred for treatment, compared with 8·2 last year. With regard to adenoids, 202 cases were reported, compared with 231 last year, while 0·8 per cent. were referred for treatment, compared with 0·6 last year. There were 895 cases of tonsils and adenoids occurring together, while 4·5 per cent. of the children examined were recommended treatment for this condition, compared with 4·1 last year.

Enlarged Glands.—Some enlargement of the cervical or submaxillary glands was found in 1,256, compared with 1,661 last year. The cause of the enlargement of these glands is usually septic absorption from carious teeth, enlarged tonsils, or disease of the skin or scalp. The enlargement, which is the result of an adenitis, will usually yield to energetic treatment of the active cause. Such enlarged glands may, however, be invaded by tubercle bacilli, and eventually become tuberculous.

Non-Tuberculosus Respiratory Diseases. — Thirty-three children were found to have bronchitis, compared with 37 last year, and 78 were recorded as suffering from other respiratory conditions, compared with 152 last year. This indicates that respiratory catarrhal conditions have been less prevalent than during the previous year.

Physically Defective Children.—During the year 100 children were recorded as suffering from defective hearing, compared with 136 last year, the percentage referred for treatment for this condition being 0·2. The number of children suffering from defective speech was 69, compared with 82 last year, and the percentage referred for treatment for this condition was 0·1, compared with 0·08 last year. The presence of deformities is reported in 196, the percentage referred for treatment being 0·8, the same as last year.

Nervous Diseases.—Fourteen cases of epilepsy were reported, compared with ten last year. There were five cases of slight chorea, compared with four last year. Severe cases of chorea should always be regarded with suspicion, as encephalitis lethargica may present symptoms very similar to this condition. Other nervous conditions were found in 28 children, compared with 32 last year.

Enlarged Thyroid.—Some enlargement of the thyroid gland was found in 11 children, compared with 49 last year. In 7 of the

11 cases treatment was recommended. The number of cases of enlargement in the three age-groups was as follows : 5–6 years, 1 girl ; 7–9 years, 3 girls ; 10–12 years, 1 boy and 6 girls.

Rickets.—This condition was found in 34 children, compared with 76 last year. Of these 4 were referred for treatment. The majority of the children with rickets are now referred for expert advice, and treatment to the orthopaedic clinics.

Other Defects and Minor Ailments.—Impetigo contagiosa, which is occasionally a cause of school closure, called for treatment in 0·2 per cent. of the children examined, compared with 0·1 per cent. last year. The percentage of cases of otitis media recommended for treatment was 0·2 and for other ear diseases 0·3. The percentage of children referred for treatment for anaemia was 0·2, the same as last year. The number of children with evidence of cardiac disease, including both organic and functional conditions, was 225, compared with 323 last year, of which 56 were referred for treatment and 169 were kept under observation. The percentage referred for treatment for cardiac disease was 0·03 for organic disease, compared with 0·01 last year, and 0·4 for functional disorder.

Vaccination.—The percentage of school children who are unvaccinated continues to rise. Of 13,604 children examined 4,637 were vaccinated and 9,057 were unvaccinated, the percentage of vaccinated being 33·9, compared with 34·9 last year, and the percentage not vaccinated being 66·1.

The high percentage of unvaccinated children in the county is a cause of anxiety, in view of the persistence of smallpox in London. It is true that the disease is of a mild type and rarely fatal, but there always exists the possibility of alteration in type with increased virulence. It is anticipated, however, that with the restriction of vaccination to one insertion there may be less objection on the part of parents with a consequent increase in the number of children vaccinated.

Chapter IV.—THE TREATMENT OF DEFECTS AND MINOR AILMENTS.

With the exception of extended facilities for dental treatment there has been no special alteration in the arrangements provided for the treatment of the defects and minor ailments during the year.

Operative Treatment for Tonsils and Adenoids.—Operative treatment for these conditions is carried out in the hospitals in the county, for which a fee is paid to the operating surgeon, the anaesthetist, and the hospital authority. During the year 1,190 school children were operated upon under your Council's scheme for tonsils and adenoids, compared with 1,097 last year. There is some evidence from the reports of the Assistant School Medical Officers that removal of the tonsils is carried out more frequently than is absolutely necessary.

Correction of Defective Vision.—Children with defective vision are referred by the Assistant School Medical Officers to the ophthalmic surgeons in their respective districts. The number of children found to have some degree of defective vision was 951, compared with 1,226 in 1928, and the number referred to ophthalmic surgeons was 910, compared with 899. The number of children supplied with glasses was 662, compared with 737 last year.

Dental Treatment.—The present arrangements for the provision of facilities for dental treatment are as follows: (*a*) Two whole-time dental surgeons. (*b*) Fourteen County Council dental clinics at Hertford, Hatfield, St. Albans, Watford, Stevenage, Hitchin, Letchworth, Waltham Cross, High Barnet, New Barnet, Hoddesdon, Radlett, Kings Langley, and Puckeridge. (*c*) Three voluntary clinics at Harpenden, Welwyn Garden City, and Welwyn. (*d*) Arrangements with dental surgeons to carry out treatment in the case of school children at Royston, Buntingford, Berkhampstead, and Tring.

It is desirable to define the aim of the County Council dental scheme as some misconception exists as to the means by which the final dental treatment and care of all the school children in the county can be secured. The aim of such a scheme is to provide for the examination and treatment of all school children belonging to the 6–8 age group that is children of 6, 7, and 8 years of age. The scheme must also provide for the annual re-examination and necessary treatment of all children in this group. By this means it is expected that all the children of school age within reasonable reach of the dental clinics will eventually be inspected and treated, so that when they leave school at the age of 14 they will have healthy teeth.

Treatment of Ringworm.—Arrangements for the X-ray treatment of ringworm have been made with the authorities of the Royal Free Hospital, Gray's Inn Road. During the year 22 cases of ringworm have been treated by this method, compared with 13 last year, and the results continue to be excellent.

Minor Ailments.—The number of defects treated at the two minor ailment clinics at Hitchin and Hatfield was 174, and the number treated as a result of following up by the school nurses was 1,907, compared with 1,831 last year. Particulars of the various minor ailments and defects treated under this heading are given in the appendix at the end of the report. Of the total number of defects of all kinds treated in connection with clinics and school nursing 80·1 per cent. were successfully treated or still under treatment, compared with 77 per cent last year.

Orthopaedic and Massage Treatment.—School Children suffering from various orthopaedic defects are referred by the Assistant School Medical Officers to the orthopaedic and massage clinics in the County for expert advice and treatment.

The British Red Cross have established in Hertfordshire 6 Orthopaedic Centres, 9 Massage Clinics, and 1 After-Care Centre.

The Massage Clinics are at Harpenden, Hatfield, Hitchin, Letchworth, St. Albans, Watford, Welwyn, and Welwyn Garden City and Hoddesdon. They are open, at least, 3 days in the week, and some of them 6 days. They are staffed by fully qualified masseuses, and are under the control of the County Supervisor.

A variety of forms of treatment is given, including Massage, Galvanism, Faradism, Radiant Heat, Remedial Exercises, and Re-Education.

The After-Care Centre at Hertford is open one day a fortnight, when it is visited by the County Supervisor. Exercises are given, splints are supervised and repaired, and plasters are made and renovated.

The Orthopaedic Centres are at St. Albans, Hitchin, Letchworth, Watford, Hertford, and Hoddesdon. They are visited at regular intervals by the Orthopaedic Surgeon, who there sees all the Infants and School Children who are sent for treatment by the Infant Welfare Doctors and the School Medical Officers. He also sees any cases sent for an opinion by their local Medical Practitioner.

Hospital in-patient treatment is carried out at the Royal National Orthopaedic Hospital and at the County Branch at Brockley Hill.

In the following table particulars are given of the work carried out at the various clinics and centres during the year.

TABLE VII.—Giving particulars of various defects and morbid conditions dealt with at the Orthopædic Clinics and Centres during the year.

Structure.	Condition.	Under 5.	5 to 15.	Adults	Total
Bones & Joints (Congenital).	Deformity of upper limb .	2	6	1	9
	Deformity of lower limb .	45	12	1	58
	Deformity of head & trunk	6	6	—	12
Bones & Joints (Acquired).	Deformity of upper limb .	—	1	1	2
	Deformity of lower limb .	115	41	28	184
	Deformity of head & trunk	—	13	12	25
Bones . . .	Infections . . .	—	3	2	5
	Injuries & Fractures .	3	46	173	222
	New Growths . .	—	5	5	10
	Amputations . . .	—	—	8	8
Joints . .	Infections—Arthritis .	—	8	96	104
	Tuberculosis .	—	6	10	16
	Injuries . .	1	13	141	155
Central Nervous System.	Infantile Paralysis . .	11	30	11	52
	Hemiplegia . . .	2	11	7	20
	Spastic Paralysis . .	—	6	1	7
	Encephalitis Lethargica .	—	—	1	1
	Other Conditions . .	2	—	6	8
Peripheral Nervous System.	Injuries to Nerves . .	6	1	16	23
	Neuritis & Sciatica .	—	—	80	80
	Other Conditions . .	1	1	8	10
Connective Tissues	Scars, fibrositis, etc. .	2	2	36	40
Muscles & Tendons		18	101	116	235
Constitutional .	Rickets . . .	5	—	—	5
	Rheumatism . . .	—	—	77	77
Vascular System .		3	—	8	11
Other Conditions		3	5	22	30
		225	317	867	1409

EXPLANATORY NOTES.

Acquired Deformities of Lower Limbs.

Includes all cases of knock knees and bow legs.

Muscles and Tendons.

Includes cases of postural kyphosis, scoliosis and early flat feet.

The only cases included under the heading "Rickets" are those having no definite deformity.

When a case of rickets has a definite deformity, this case is included under the special heading which refer to such deformity.

TABLE VIII.—Giving the number of patients sent to Hospital and attending Clinics during the year.

	Number of Patients sent to Hospital.			Number of Patients attending Orthopædic Centres and Clinics.		
	Under Five.	Five to Fifteen.	Over Fifteen.	Under Five.	Five to Fifteen.	Over Fifteen.
In-patients .	16	16	32			
Out-patients .	3	2	12	225	317	867
Total .	19	18	44	—	—	—

Chapter V.—SCHOOL NURSING.

The duties of the nurses in connection with the medical inspection of school children includes (*a*) visiting the school with the Assistant School Medical Officer for routine medical inspection, (*b*) visiting the schools for inspection as regards cleanliness of the children, (*c*) following up cases of defects and minor ailments with a view to the carrying out of suitable treatment, (*d*) assisting in the nursing treatment of minor ailments, (*e*) attending dental or other clinics providing treatment for school children.

The visits of the nurses to the schools for inspections as to personal cleanliness average for the year was 16 compared with 15 last year. The beneficial results of these visits to the school by the nurse is indicated by the fact that the number of individual children found verminous was 437 compared with 397 for the previous year. The total number of examinations and re-examinations of children made in the schools by the school nurses for cleanliness and minor ailments was 253,061 compared with 243,462 last year, and the number of children cleaned and re-cleaned was 2,808.

A further valuable department of the work of the School Nurse is the following up of various minor ailments and defects, so as to secure suitable and successful treatment. In this direction the nurse does excellent work, the value of which cannot be correctly demonstrated by mere figures and statistics. Reference to the following table, however, will show that throughout the county 80·1 per cent. of the defects reported

upon were treated satisfactorily or were in receipt of medical advice. The percentage for Watford, namely 89·9 is excellent.

The following table which has been prepared for me by Miss Harrington, the County Health Visitor, and County Superintendent of Nurses, gives particulars of the excellent work carried out by the nurses during the year :—

Work of School Nurses during 1929.

	Returns from Nurses employed by Local Nursing Associations undertaking School Nursing.	Returns from County Council School Nurses.	Watford (Mrs. Stokes).	Grand Total of all School Nursing and Clinic Work.
Number of Schools ...	207	28	12	247
Number of Children ...	29,061	6,196	6,362	41,619
Medical Inspections and Clinics attended ...	1,175	502	261	1,938
Number of other Visits to Schools	3,264	541	259	4,064
Number of Examinations and Re-examinations for cleanliness and minor ailments	185,813	44,474	22,774	253,061
Number of Individual Children found verminous	364	44	29	437
Number of Individual Children found unclean	1,445	287	318	2,050
Number cleaned and re-cleaned	1,932	642	234	2,808
Number of visits to Parents *re* defects and uncleanliness	10,920	2,709	1,099	14,728
Total number of defects reported on	6,571	1,555	1,471	9,597
Number treated satisfactorily and number under treatment at end of year	5,295	1,075	1,323	7,693
Percentage treated satisfactorily and under treatment at end of year ...	80·5	69·1	89·9	80·1

Chapter VI.—THE PHYSICALLY AND MENTALLY ABNORMAL CHILD.

Particulars are obtained from the Assistant School Medical Officers, the school nurses, and the school attendance officers from time to time regarding abnormal children who have come under their observation. In addition during the present year information has been received from the teachers regarding the presence in the schools of mentally subnormal children. This information is given in a special report regarding each child on a special form.

The Mentally Defective Child.—During the year 115 children were examined as to their mental condition. Of this number 47 were recommended for admission to a special school, and 17 were referred as ineducable to the Committee under the Mental Deficiency Act. At the present time there are 123 children attending certified schools for mentally defective children. All children, with one or two exceptions, are specially examined by Dr. Boycott, who employs the Stanford revision of the Benet Simon tests in arriving at a decision as to the standard of intelligence of each individual child.

Report of Beechen Grove Special Day School, Watford.—

No. of children on books 31st December, 1929, 44.

Staff.—Head Mistress, Miss W. Schulze; Certified Assistant Mistress, Miss K. Schulze.

The ordinary work of the School has continued as heretofore, three R.'s, etc. Handwork has included work in wood, sealing wax, leather, basketry, hat trimming, rugs, knitting, weaving in cane and raffia, gardening.

The school garden has a good effect on the children, both mentally and physically. A second prize and silver medal were awarded at the Watford Horticultural Show for the best collection of vegetables from any Hertfordshire school garden. Both children and the local hospital have benefited from the garden produce.

Music is a feature of the school work and its influence for good on the children has been great. Three further musical successes have been gained during the year, two of the successful candidates having no pianos in their own homes and relying entirely on the school pianos. One boy has succeeded in passing a difficult examination in pianoforte playing, i.e. the Senior Grade of the Trinity College of Music; the only tuition was that given in the school.

E. A. passed her first examination at the same College, while D. H. passed her second examination. The parents in each case wrote letters of gratitude and appreciation.

Further letters were received from various parts of the Kingdom asking if children were to repeat their broadcasting experience from

2 L.O., but difficulties arise in the breaking of the children's voices and others leaving the school.

A successful exhibition and sale of handwork was held at the Watford Horticultural Show.

Several prizes were awarded by the Bushey Arts and Crafts Guilds for handwork :—

Needlework, 1st and 2nd prizes.
Leather work, 1st and 2nd prizes.
Basket work, 1st and 2nd prizes.
Raffia work, 2nd and 3rd prizes.
Knitting, 2nd prize.
Rug making, 3rd prize.

Eighteen children were taken to visit the Zoo. The School football team has had a very successful run, not one match having been lost during the season. A cricket team was formed during the summer months ; this proved a success. One boy has reached the age limit. He has commenced his training in motor cycling engineering and twice a week he is being trained with the Watford F.C. with a view to becoming a professional footballer. Great thanks are due to the Watford F.C. and their manager for their kindness to the School football team.

The Dull and Backward Child.—During the year reports were received of 37 children of this type. There are now special classes for dull and backward children at the Alexandra Mixed and Victoria Schools, Watford.

The Blind Child.—During the year particulars were received of 3 blind or partially blind children and these were recommended for admission to special schools. At the present time 19 blind children are attending certified schools or classes for the blind.

The Deaf Child.—During the year particulars were received of 2 deaf or partially deaf children and these were recommended for admission to special schools. At the present time there are 25 totally deaf or deaf and dumb children in certified schools for the deaf.

The Epileptic Child.—During the year particulars were received of 5 epileptic children. At the present time 3 epileptic children are in special schools for epileptics.

Physically Defective Children.—These are children who are crippled or who suffer from some physical defect. Particulars of the work carried out in connection with the treatment of physically defective children are given in the section dealing with orthopaedic treatment. At the present time there are 47 physically defective children in special schools.

Chapter VII.—Report of the Managers of the Hertford Kingsmead Special Residential School

Relating to the Year ended 31st December, 1929.

1. The numbers in residence on the 31st December, 1929, were : Hertfordshire children 47 boys, 31 girls, total 78 ; out-county children 19 boys, 16 girls, total 35 ; making a total number of 113 children under sixteen years of age. In addition there were 10 feeble-minded young women in residence, making a grand total of 123 in residence.

The Managers are pleased to report that the health of the children has been good and that there has been no outbreak of epidemic sickness during the year. In the school the usual curriculum has been followed but it is hoped that fresh arrangements may be made whereby a greater amount of time will be given to woodwork and handicraft than has been possible in the past. The Managers again desire to emphasize the importance of the provision of a suitable institution to which such children as have passed through the school but are not fit to return to their homes, may be transferred. Various items of handwork were shown at the Bushey Arts and Crafts Guild's Exhibition, when the following prizes were won :—

1st Prizes for Knitting, Rugwork, Raffia Work and Cross Stitch Canvas.
2nd Prize for Embroidery in Wool.
3rd Prize for Leatherwork.

Several other exhibits were "highly commended".

The Managers submit with this report, the reports of the School Medical Officer and Superintendent, which they consider satisfactory.

With regard to the financial conditions, the net expenditure out of the county rates for the financial year ended 31st March, 1929, is £2,615 17*s.* 9*d.* The net cost per head falling upon the county rates is £20 18*s.* 7*d.*, excluding staff and £18 13*s.* 8*d.*, including staff. For the year ended 31st March, 1928, the net cost per head on the county rates was £24 1*s.* 11*d.*, excluding staff and £21 9*s.* 11*d.*, including staff.

W. Graveson,
Chairman.

School Medical Officer's Report.

2. The health of the children in the School during 1929 had been good and there have been no cases of serious illness or of infectious disease ; there have also been no accidents apart from minor cuts and injuries.

During the year 34 children were admitted to the school ; of these 17 were county cases and 17 out-county cases. There were 27 children discharged during the year, of which 13 were county cases and 14 out-county cases.

In the following table particulars are given of the children admitted and discharged during the year :—

Number of	*Boys.*		*Girls.*			
	Herts.	*Out-County.*	*Herts.*	*Out-County.*	*Adults.*	*Total.*
Admissions . . .	8	8	9	9	–	34
Discharged into care of parents . . .	3	–	1	2	–	6
Discharged into care of parents pending admission to Certified Institution .	2	–	1	–	–	3
Discharged to other Institutions	1	–	1	4	–	6
Discharged to other Authorities . . .	–	2	1	–	–	3
Discharged as unsuitable or otherwise dealt with .	1	3	2	3	–	9
Total Discharges .	7	5	6	9	–	27

It will be observed from the above table that no adults over the age of 16 were admitted or discharged during the year. The existing accommodation for these cases consists of ten beds, which were fully occupied during the year.

Improvement in Mental Condition.

3. There is little new to report in this respect. The improvement in the mental condition necessarily varies according to the age of the child and the grade of defect on admission. The Intelligence Quotient does not vary much even after a period of years, but this does not prevent a very marked improvement taking place in the conduct and capacity of the child as a result of the instruction which is given in the school. Experience has shown that high grade cases may respond sufficiently well to instruction and discipline to be able when they leave school to follow some useful remunerative occupation although some degree of kindly supervision is invariably necessary even in these cases. The average Intelligence Quotient of children in the school is between 50 and 60 per cent and efforts are made, as far as possible, not to admit children with an Intelligence Quotient under 50 per cent, but in the case of young children this is not always practicable and certain cases have to be admitted for a period on trial. The following discharge report gives some idea of the mental improvement which results in children in whom the standard of intelligence is not too low.

E. A. Age 16.

"General health good; has made very good progress in both mental and manual work. I.Q. = 65·4 per cent. compared with 60 per cent. in 1923 This boy has no home and will return to the care of the Guardians. He would benefit by a course of training in a certified institution or would do quite well if placed under the guardianship of someone who would employ him, e.g. garden work or light farm work. Conduct good. This boy has really responded well to the instruction in the school."

Improvement in Physical Condition.

4. The health of the children during the year has been exceptionally good. There has been no case of infectious disease or of any serious illness. The nutrition of the children during the year has been satisfactory and all children have gained weight during the twelve months, some to a considerable extent: one boy $21\frac{3}{4}$ lbs. and one girl $13\frac{1}{2}$ lbs.

This satisfactory increase in weight is due to regular routine and generous feeding and to the care which is taken to supplement the diet with Grade A milk or cod liver oil in the case of children who are much below their standard weight. It has been observed that some loss of weight takes place in several children while at home during the summer holiday. In three cases at one time during the year there was a loss in weight to the extent of $1\frac{1}{2}$ lbs., $5\frac{1}{4}$ lbs., and $6\frac{1}{2}$ lbs., but this loss was regained in the course of time.

There were no serious accidents during the year. There were several minor cuts and injuries which are met with amongst children of this type. Two children were sent to the County Hospital for X-ray examination ; one stated she had swallowed a needle but the plate was negative and the other was examined for injury to the elbow. Twelve cases were admitted to the County Hospital for operative treatment, one for the removal of a nasal obstruction and eleven for the removal of tonsils and adenoids. During the year eighty children were referred for ophthalmic examination and eighteen were supplied with spectacles, while twenty-six children received dental treatment.

Special attention is paid to children who have any definite physical defect or minor ailment, and all children are examined as to their physical condition at least once a year.

The care exercised in the supervision of the children's general health and in securing without delay the immediate treatment of defects and minor ailments is reflected in the children's attendance at school and in the manner in which, up to the standard of their capacity, they respond to the instruction given.

Conclusions.

5. The work in connection with the supervision and education of the children in the school during the year has been carried out in the usual efficient manner and the general health and well-being of the children have been excellent. The consideration of the annual reports on the mental progress of each individual child by the Managers of the School has proved a helpful method of assessing the extent to which each child is responding to instruction, and of reviewing doubtful cases of low grade as to the advisability of their retention or discharge. The aims and functions of the school have been well expressed in the recent report of the Mental Deficiency Committee of the Board of Education and Board of Control ; " they include the establishment of the child's self respect, self confidence and self control. To attain these ends the aims of the Special School must include the development of a sense of responsibility, of application and of concentration ; also training of the intelligence to function rightly, training in the practice of health habits, encouragement of initiative and of performances of the simple activities of every day life, instruction in forms of manual work and finally instruction in reading, writing and arithmetic."

The Kingsmead Special School is doing good work in the education and training of mentally defective children of a medium and high grade type, but the value of its work will be much increased when the Colony at Cell Barnes becomes available for a continuance of special training in manual work in the case of those children who on leaving the school are not able to return home or follow any useful occupation except under continued supervision.

H. Hyslop Thomson.
School Medical Officer.

Superintendent's Report.

6. Favourable progress continues to be shown in the children passing through the school and there is improvement generally in the intelligence of most of them.

Their physical health is always the first consideration and every care is given to detect various weaknesses and prevent sickness.

The health record for the past year is very gratifying, being free from serious illnesses or accidents.

The children are well fed with varied and nourishing diets approved by the Medical Officers. Vegetables from our own garden supply our needs all the year round and the result of good food is seen in the improved physique of a number of the children as recorded by the Medical Officers.

The children are kept scrupulously clean, given plenty of fresh air and sunlight, encouraged in outdoor exercise, drill and recreations.

Attention is given to daily prayer night and morning.

Divine Service is regularly held each Sunday morning conducted by the Chaplain (Rev. T. Landulph Smith), whose addresses are always interesting and well within the children's understanding.

Special attention is given to the training of the elder girls by the Matron, in laundry work, kitchen work, cooking and general domestic work, each girl taking a keen interest in the subjects and becoming generally useful.

The Gardening Classes prove beneficial to both boys and girls, encouraging healthy exercise in the various occupations of digging, planting vegetables and the cultivation of flowers, etc., which give them much pleasure.

A gradual improvement in the steadiness of the children, in their powers of concentration and interest in their work, is noticeable in a brief period after admission.

I am grateful for the sympathetic care and diligence of the staff, who work most assiduously to promote the welfare and happiness of the children, encouraging them in the essential principles of forming good character, and to be respectful and polite in their general behaviour at all times.

In addition to the Boy Scout Movement adopted in 1928, a Company of Girl Guides was formed in July, and having reports from the Officers concerned, I herewith include them, fully appreciating their kindness in rendering valuable service for the good of the school.

Report on Girl Guides, 3rd Hertford Company.

" The Company was started in May, 1929, with eight Guides. They showed great keenness from the beginning.

" The Guides were enrolled by Mrs. Bowlby, Assistant Head of Extension Guides, on July 18th, in the presence of Lady Faudel-Phillips (County President), Miss Trotter (Division Commissioner), and the Honourable Mrs. Tufton (County Secretary for Middlesex).

" King's Colours were kindly presented by Mr. Walters, Superintendent of the School. They were dedicated at All Saints' Church on 20th September.

" The Guides were guests at the Annual Party for Extension and Post Guides in London on 1st December. Sir Lionel Faudel-Phillips kindly lent a conveyance for the Guides to and from London. Each Guide exchanged greetings with the Chief Guide.

" The general conduct, personal neatness and keenness to learn has been satisfactory throughout.

" They have shown great interest in the varied subjects taught.

"Self-control and a knowledge of the team spirit is gradually becoming pre-eminent among them.

"They are a great pleasure to train and a credit so far to the Movement.

(Signed) ETHEL G. STEPHENS, *Capt.*
J. FAUDEL-PHILLIPS, *Lieut.*

Report on 3rd Hertford Group Boy Scouts.

"The progress of the 3rd Hertford Group Boy Scouts during the year ended December, 1929, has been exceedingly good in many directions.

"Every boy gained the Tenderfoot Badge and passed in a higher grade, which emphasizes how industriously the boys have applied themselves to their work.

It is also encouraging to note the eagerness to gain the Second Class Badge.

"Attempts were made in bridge building, knotting and the uses of the axe with satisfactory results.

"I much appreciate the assistance of Mr. G. Fisher for his kindly help with instruction weekly, which has in a great measure brought the Group up to its present standard of efficiency.

(Signed) A. L. RENDALL,
Group Scoutmaster.

Various gifts were received from generous donors, whose kindness is gratefully appreciated.

Communications from parents and friends express appreciation of marked improvement in the general health and conduct of their children at home and elsewhere.

During the year I have come in contact with several boys and girls who passed through the School, and while some are doing very well, others I regret to say are idling at home to their detriment, having no suitable place to go to.

G. T. S. WALTERS,
Superintendent.

CHAPTER VIII.—STRUCTURAL AND SANITARY ALTERATIONS.

Special reports are received from time to time from the Assistant School Medical Officers regarding structural and sanitary defects. These usually refer to defective lighting, heating, sanitary arrangements, cloakroom accommodation, playgrounds, etc. All such reports are investigated by the County Surveyor and such action is taken as is considered necessary and practicable. Although some of the older schools in the county still fall short of a satisfactory standard, many improvements have been and are being carried out and these with the increase in the modern type of school has raised the standard to a much higher level. In the newer type of school consideration has been given to the question of medical inspection, and facilities for this are now provided. In the annual reports of the Assistant School Medical Officers reference is from time to time made to defects; these are referred to the County Surveyor for investigation.

Chapter IX. — Open-air Instruction — Physical Training — Juvenile Employment.

Open-air Instruction.—In previous reports reference has been made to the value of open-air instruction in improving the physical and mental condition fo growing and delicate school children. This method of instruction is carried out in many schools in the county during the summer months, when the weather permits of the children sitting out of doors. Open-air instruction is of special value in the case of backward and defective children. It is an interesting fact that in the experience of several teachers the children who live some distance from school are in the morning more alert mentally than those who live close at hand.

Physical Training.—The scheme for the physical training of children attending public elementary schools continues to expand. Such training is of real value in improving the nutrition, physical condition, and general carriage of the child, while it makes for physical and mental alertness. The following extracts from the report of Mr. Richardson, the Organizer of Physical Training, deal with some special aspects of the scheme.

Extracts from Mr. Richardson's Report.

Physical training is one of the "health subjects" of the school, for amongst other things it seeks by its practice to assist in the production of a healthy race. If this be true then it is of fundamental importance that those who have to teach it should have a right conception of its aims and objects. Should this be lacking, even if teaching skill is present, little real progress can be made. In the school it is the head teacher, if necessary, who should give the lead, for by doing so, a full and regular amount of time will be given to the subject, winter arrangements will be carefully thought out, the playing space, be it playground or field, will be carefully organized so that each class shall have its due. But above all the enlightened teachers will realize that this is a "living" subject, rightly practised its effect for good is never in doubt, and for the child it is of paramount importance ; nothing can take its place.

Posture of Children.

Attention has been directed to this in previous reports but it is of such importance that no apology is needed to refer to it once again. Correct posture enables the organs of the body to function properly with the minimum of effort, and any deviation causes disorder, with the consequence that the child may be affected mentally. This may be transitory, of course, but ill-suited desks inducing cramped sitting, bad lighting causing twisted spines, poor ventilation impairing respiration, are still met with in schools, and have their effect on the mental capacity of the child. It has been truly said that " with good posture the body is in a position of greatest efficiency. Bad posture breeds fatigue and fatigue bad posture, and so a vicious circle is created ". It is pleasing to be able to report that many teachers are giving this their serious attention, particularly in the girls' schools, but much more is possible, and that with little effort. If teachers would keep this point in mind and make a practice of correcting children at all times whether they be sitting in the class-room or moving in the playground, a quick improvement in the bearing of the children would be noticed. An effort must be made to cultivate a habit of good posture. It is only by constant insistence shall we get the children to secure that sense of " good carriage ". In regard to the senior children, this question assumes even greater importance, not only from a physiological point of view but from the fact that a " good bearing " tends to induce to personal care and pride, a great asset when the children leave school to seek employment.

Winter Physical Training.

During the winter months opportunity for spontaneous activity by the children is necessarily very much restricted, whilst lack of suitable facilities during inclement weather for normal work make it very essential that the physical training should be carefully organized for this difficult period. No matter the conditions, children must have some organized movement during the day, this of course will vary with the facilities available, but one cannot too strongly point out how misguided it is, when it is not possible to take an outdoor lesson, to neglect the physical training altogether.

Winter is the time of epidemics, and people are urged to avoid congested conditions, and to keep in the open air as much as possible. Those simple facts alone should be sufficient to secure, when outdoor lessons are impossible, suitable indoor

physical training lessons, with open windows and *a complete change of the air in the classroom as often as possible*. This may involve some little trouble and inconvenience, and in the view of some hardly worth while, but if it secures better health and more regular attendance of the children it should be carried out.

Realizing the difficulties that obtain in many of our schools and to comply with many requests from teachers, a special pamphlet on " Physical Training in Winter Months " has been prepared and a copy is sent to each teacher.

Clothing.

It is impossible to get effective organized movement if limbs and joints are unable to enjoy free play so that everything should be done to prevent the restriction of movement. As a general rule the clothing of the children is tending to allow greater freedom, particularly the girls, whilst a large proportion of boys have knickers exposing the knees, held in position by a belt instead of braces. This question of clothing is, of course, largely one for the parents, but whatever is worn much can be done to secure that necessary freedom. By encouraging the use of shoes the work of a class will improve almost beyond recognition. With boys on all suitable occasions, the removal of coats and waistcoats should be insisted upon. The mere fact of doing this gives the correct atmosphere to the lesson. And finally during cold weather top coats should not be worn, otherwise how is it possible to get any effective movement ? To say that the children will get cold is a confession of inability to give the correct type of lesson. The work should be linked up so as to give an even flow of movement which will result in increased circulation and general warmth of the body. Under such conditions, extra clothing is not only unnecessary, but may be decidedly uncomfortable for the child.

Re-organization.

Physical Training, in common with the rest of the curriculum, will be affected by the proposed changes in conditions, and although it is much too early to go into details regarding the change, there are a few salient facts which ought to receive attention. The work of the junior schools must be preparatory, particularly in regard to games. In the senior schools there must be no diminution in the time given to physical education, in fact the reverse should be the case. A higher standard of work should be possible in view of the

possibility of partial specialization in physical training and a more careful grading of the children. Almost the whole of the classes in the senior schools, both boys and girls, should go to the playing fields for games, for all senior schools should have access to a playing field. Now that Swimming will be taught in the junior schools, the possibilities for its expansion are very much greater in the higher classes of the senior schools. Suitable clothing for physical activities, both for boys and girls, will undoubtedly receive consideration, whilst undoubtedly the "House System" will further be extended and developed. There can be little doubt that if the physical education is organized on sound lines it can be of the greatest possible assistance, for through it the corporate life of the school will largely find expression, and furthermore it will go far to develop that spirit and tone which is so essential throughout life.

Conclusion.

Believing that a report of this nature should not only keep the Authority fully informed as to progress and development, but that it should contain constructive criticism which is intended to prove helpful, it is very desirable that all teachers should have an opportunity of examining the suggestions contained herein. This report may not only be useful, perhaps, in presenting another point of view of physical education, but may form the basis of discussion when one makes future visits to the schools, which discussions are in themselves extremely desirable.

In concluding this report, one is very glad to be able to thank all teachers with whom one comes into contact for their loyal and willing co-operation.

Employment of Children.—With regard to the employment of school children it is necessary to point out that Section 13 (1) of "The Education Act, 1918", came into operation on the 1st day of April, 1920, and that the conditions which now prevail in the county with regard to the employment of children are as follows: (1) A child under the age of 12 shall not be employed, (2) a child of the age of 12 or upwards shall not be employed on any Sunday for more than two hours, (3) a child of the age of 12 or upwards shall not be employed on any day on which he or she is required to attend school before the close of school hours on that day, (4) a child of the age of 12 or upwards shall not be employed on any day before 6 o'clock in the morning nor after 8 o'clock in the evening.

Chapter X.—HEALTH EDUCATION.

At the request of the Chief Medical Officer of the Board of Education inquiries have recently been carried out as to the extent and character of the practice and teaching of hygiene in the schools in the county. For the purpose of the inquiry 18 schools were selected without any knowledge as to whether health education in any form was a feature of the school, and in order that particulars might be obtained from representative Schools the following types were included: Infants' Schools, Junior Mixed, Senior Boys', Senior Girls', Secondary Boys', secondary Girls', and Rural Schools.

The following is a summary of the information received regarding health instruction in the schools selected:—

Infants' Schools.—In two schools informal talks; in one school two lessons each week of twenty minutes' duration; diagrams displayed; subjects chiefly sunlight, fresh air, and cleanliness.

Junior Mixed Schools.—In two schools short talks; in one school half an hour lesson each week on hygiene, including cleanliness, clothing, food, fresh air, sleep, teeth, etc. In two schools handkerchief drill and breathing exercises.

Senior Boys' Schools.—In two schools, 30 to 35 minutes per week given to teaching of hygiene; in third school instruction in hygiene incidental to other work.

Senior Girls' Schools.—In one school health education is treated as part of everyday life of school; in second school instruction in hygiene is included in domestic science. On Monday morning five minutes devoted to instruction in personal cleanliness and school hygiene.

Secondary Boys' Schools.—No special instruction in hygiene given.

Secondary Girls' Schools.—No systematic course in hygiene.

Rural Schools.—In one school half an hour weekly is given to talks with senior girls on such subjects as bodily health and cleanliness, regular habits, first aid, unhealthy homes, etc. In second school fortnightly lesson is given to older children based on Board of Education syllabus; in third school no separate instruction given.

A further inquiry on Health Education in Schools has been carried out by Dr. Gross, of Hemel Hempstead, who sent a questionnaire to each head teacher in his district asking for information as to the extent to which such instruction was being carried out in the schools in his district. The result of this inquiry may be summarized as follows :—

From the returns received from 24 head teachers it was found that in 50 per cent. of the schools or departments health education is included in the time-table for all classes, in 25 per cent. it is on the time-table for some classes only, and in the remaining 25 per cent. it is not included in the time-table at all. It was found, however, that in those schools where health instruction was not included in the time-table impromptu talks on matters relating to health are given during general instruction.

The time allocated to health education varies from 15 to 50 minutes per week. In his report Dr. Gross urges the importance of the inclusion of health education in the school time-table with a specified time allotted for such instruction.

The conclusion to be drawn from the information obtained by means of the above inquiries are that while there is a certain amount of elementary instruction on health matters given in many schools in the county, it cannot be regarded as a systematic course of instruction and that it is desirable that recognized health instruction should be included in the school time-table. It is rather surprising that in some of the senior schools of the county no attempt is made to give systematic instruction in hygiene. Such instruction to boys and girls in senior schools by teaching them to know how to keep fit and well must obviously exercise some good influence on the general standard of public health.

Chapter XI.—CONCLUSIONS.

The work of School Medical Inspection has been carried out in a satisfactory manner during the year.

The estimated number of inspections required was 12,861 and the actual number carried out was 13,694. The percentage of defects found on examination for which directions were considered necessary was 49·6 compared with 47·9 last year. Schools were closed on 57 occasions, compared with 35 last year ; the chief cause being influenza, measles, and scarlet fever.

The general nutrition of the children has been better than last year, the number of children requiring treatment for this condition being 0·7, compared with 0·9 for 1928.

It is satisfactory to be able to report further definite improvement in the cleanliness of the children. The percentage of children with uncleanliness of the head referred for treatment was 1·1 compared with 1·2 last year, while that of children with uncleanliness of the body referred for treatment was 0·5 compared with 0·7 for 1928. This improvement is chiefly due to the excellent work and untiring efforts of the school nurses.

There is a decrease in the percentage of children referred for treatment for defective vision, namely, 3·7, compared with 4·0. The number of children supplied with glasses during the year was 662.

There is a slight decrease in the number of children with defective teeth, the percentage being 38·7, compared with 38·9 for the previous year, and the percentage referred for treatment being 22·6, compared with 20·3. During the year increased facilities have been provided for dental treatment, and there are now two County Council dentists attending County Council clinics.

Fifteen cases of definite pulmonary tuberculosis were recorded, compared with 12 cases last year.

There is a slight decrease in the number of children referred for treatment for enlarged tonsils, namely, 8·0 per cent., compared with 8·2 per cent. for 1928. With regard to adenoids, there is a slight increase in the number referred for treatment, namely, 0·8, compared with 0·6 last year. There is some increase in the number of children referred for treatment for tonsils and adenoids occurring together, the percentage being 4·5 compared with 4·1 for the previous year. The number of children operated upon was 1,190.

The percentage of children referred for treatment for defective hearing was 0·2, compared with 0·3 last year. The number of children with deformities was 196, compared with 263 last year, the percentage referred for treatment being 0·8, the same as last year.

The percentage of children who have not been vaccinated continues to be far above what it should be in view of the presence of small-pox in the country. Of the 13,694 children examined the percentage of vaccinated was 33·9 and the percentage of not vaccinated 66·1.

The results obtained in the treatment of defects and minor ailments continue to be satisfactory, and have reached a higher level than last year. The percentage of defects treated during the year was 80·1, compared with 77 for 1928. These figures indicate the excellence of the good work carried out by the School Nurses.

In the body of the Report reference is made to the value of health education in schools in relation to public health.

TABLE I.—Return of Medical Inspections for 1929.

A. Routine Medical Inspections.

Number of Code Group Inspections.

Entrants	4,807
Intermediates	5,380
Leavers	3,345
Total	13,532

B. Other Inspections.

Number of Special Inspections	162
Number of Re-inspections	196
Total	358

TABLE II.

A.—Return of Defects found by Medical Inspection in the Year ended 31st December, 1929.

Defect or Disease.		Routine Inspection.		Specials.	
		Number referred for Treatment.	Number requiring to be kept under Observation.	Number referred for Treatment.	Number requiring to be kept under Observation.
Malnutrition		98	652	2	2
Uncleanliness—					
Head		147	208	3	—
Body		65	216	2	1
Skin	Ringworm—				
	Head	4	1	—	—
	Body	—	—	—	—
	Scabies	6	4	—	—
	Impetigo	28	31	4	—
	Other diseases	28	16	—	—
Eye	Blepharitis	40	37	1	1
	Conjunctivitis	10	15	1	—
	Keratitis	—	—	—	—
	Corneal Opacities	—	2	—	—
	Defective Vision	455	437	58	—
	Squint	168	78	3	—
	Other Conditions	9	21	—	—
Ear	Defective Hearing	27	70	3	—
	Otitis Media	23	24	1	—
	Other Ear Diseases	37	25	7	—
Nose and Throat	Enlarged Tonsils	1077	1622	21	1
	Adenoids	112	88	2	—
	Enlarged Tonsils and Adenoids	593	277	21	4
	Other conditions	—	—	—	—
Enlarged Cervical Glands (Non-Tuberculous)		308	941	6	1
Defective Speech		17	52	—	—
Teeth—Dental Diseases		3078	2200	20	3
Heart and Circulation	Heart Disease—				
	Organic	4	48	—	—
	Functional	51	121	1	—
	Anæmia	30	47	2	—
Lungs	Bronchitis	6	27	—	—
	Other Non-Tuberculous Diseases	35	42	1	—
Tuberculosis	Pulmonary—				
	Definite	9	6	—	—
	Suspected	3	2	3	—
	Non-pulmonary—				
	Glands	2	14	1	—
	Spine	3	—	—	—
	Hip	—	4	—	—
	Other Bones and Joints	—	1	—	—
	Skin	—	—	—	—
	Other forms	—	—	—	—
Nervous System	Epilepsy	6	8	—	—
	Chorea	3	1	1	—
	Other conditions	12	15	1	—
Rickets		4	30	—	—
Deformities		105	87	4	—
Thyroid Glands		7	4	—	—
Other Defects and Diseases		103	72	10	1

B.—Number of Individual Children found at Routine Inspection to require treatment (excluding Uncleanliness and Dental Diseases).

Group.	Number of Children		Percentage of Children found to require treatment.
	Inspected.	Found to require treatment.	
Code Group—			
Entrants .	4,807	1,079	22·4
Intermediates .	5,380	1,129	21·0
Leavers .	3,345	617	18·4
Total (code groups)	13,532	2,825	20·9
Other routine inspections . . .	—	—	—

Table III.—Return of all Exceptional Children in the Area.

			Boys.	Girls.	Total.
Blind (including partially blind)	(i) Suitable for Training in a School or Class for the totally blind	Attending Certified Schools or Classes for the Blind	8	4	12
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
	(ii) Suitable for training in a School or Class for the partially blind	Attending Certified Schools or Classes for the Blind	1	6	7
		Attending Public Elementary Schools	1	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
Deaf (including Deaf and Dumb and partiallyDeaf)	(i) Suitable for training in a School or Class for the totally Deaf or Deaf and Dumb	Attending Certified Schools or Classes for the Deaf	11	14	25
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
	(ii) Suitable for training in a School or Class for the partially Deaf	Attending Certified Schools or Classes for the Deaf	—	—	—
		Attending Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	1	1
Mentally Defectives	Feeble-minded (cases not notified to the local ControlAuthority)	Attending Certified Schools for Mentally Defective Children	78	45	123
		Attending Public Elementary Schools	15	10	25
		At other Institutions	—	—	—
		At no School or Institution	2	—	2
	Notified to the Local Control Authority during the year	Feeble-minded	—	—	—
		Imbeciles	—	—	—
		Idiots	—	—	—

			Boys.	Girls.	Total.
Epileptics	Suffering from severe epilepsy	Attending Certified Special Schools for Epileptics	2	1	3
		In Institutions other than Certified Special Schools	—	—	—
		Attending Public Elementary Schools	2	—	2
		At no School or Institution	2	2	4
	Suffering from epilepsy which is not severe	Attending Public Elementary Schools	11	7	18
		At no School or Institution	—	—	—
Physically Defective	Infectious pulmonary and glandular tuberculosis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	—	1	1
		At other Institutions	—	—	—
		At no School or Institution	—	2	2
	Non-infectious but active pulmonary and glandular tuberculosis	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	10	11	21
		At Certified Residential Open-air Schools	—	—	—
		At Certified Day Open-air Schools	—	—	—
		At Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	1	7	8
	Delicate children (e.g. pre- or latent tuberculosis, malnutrition, debility, anæmia, etc.)	At Certified Residential Open-air Schools	—	—	—
		At Certified Day Open-air Schools	—	—	—
		At Public Elementary Schools	659	518	1177
		At other institutions	—	—	—
		At no School or Institution	17	24	41
	Active non-pulmonary tuberculosis	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	10	7	17
		At Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	1	1	2
	Crippled children (other than those with active tuberculous diseases), e.g. children suffering from paralysis, etc., and including those with severe heart disease	At Certified Hospital Schools	—	—	—
		At Certified Residential Cripple Schools	7	2	9
		At Certified Day Cripple Schools	—	—	—
		At Public Elementary Schools	125	84	209
		At other Institutions	2	—	2
		At no School or Institution	2	1	3

Table IV.—Return of Defects treated during the Year ended 31st December, 1929.

TREATMENT TABLE.

GROUP I. MINOR AILMENTS (EXCLUDING UNCLEANLINESS, FOR WHICH SEE GROUP V).

Defect or Disease.	Number of defects treated or under treatment during the year.		
	Under the Authority's Scheme.	Otherwise.	Total.
Skin—			
Ringworm—Scalp . . .	24	48	72
Ringworm—Body . . .	—	2	2
Scabies	—	2	2
Impetigo	31	424	455
Other Skin Disease . .	3	7	10
Minor Eye Defects— (External and other, but excluding cases falling in Group II.)	32	110	142
Minor Ear Defects . . .	6	54	60
Miscellaneous— (e.g. minor injuries, bruises, sores, chilblains, etc.) . . .	100	1260	1360
Total . . .	196	1907	2103

GROUP II. DEFECTIVE VISION AND SQUINT (EXCLUDING MINOR EYE DEFECTS TREATED AS MINOR AILMENTS—GROUP I).

Defect or Disease.	Number of defects dealt with.			
	Under the Authority's Scheme.	Submitted to refraction by private practitioners or at hospital, apart from the Authority's Scheme	Otherwise.	Total.
Errors of Refraction (including squint) (Operations for squint should be recorded separately in the body of the Report) . .	910	—	—	910
Other Defects or Disease of the eyes (excluding those recorded in Group I) .	—	—	—	—
Total . .	910	—	—	910

Total number of children for whom spectacles were prescribed :—

(*a*) Under the Authority's Scheme 662
(*b*) Otherwise . . . . . *Nil.*

Total number of children who obtained or received spectacles :—

(*a*) Under the Authority's Scheme 662
(*b*) Otherwise . . . . . *Nil.*

GROUP III. TREATMENT OF DEFECTS OF THE NOSE AND THROAT.

Number of Defects.				
Received Operative Treatment.			Received other forms of treatment	Total number treated.
Under the Authority's Scheme, in Clinic or Hospital.	By Private Practitioner or Hospital apart from the Authority's Scheme.	Total.		
1190	—	1190	—	1190

GROUP IV.—DENTAL DEFECTS.

(1) Number of Children who were :—

(*a*) Inspected by the Dentist at the following Clinics : *St. Albans, Hatfield, Waltham Cross, Watford, Stevenage, Hertford, Hitchin Letchworth Dental Clinics (County Council).*

Routine Age Groups	1,683
Specials	2,658
Grand Total	4,341
(*b*) Found to require treatment	3,593
(*c*) Actually treated	3,261
(*d*) Re-treated during the year as the result of periodical Examination	*Nil.*
(2) Half-days devoted to . { Inspection 6 / Treatment 391 } Total	397
(3) Attendances made by children for treatment . . .	5,065
(4) Fillings . . . { Permanent Teeth 579 / Temporary Teeth 97 } Total	676
(5) Extractions . . { Permanent Teeth 1,311 / Temporary Teeth 7,914 } Total	9,225
(6) Administrations of general anæsthetics for Extractions .	1,016
(7) Other Operations . { Permanent Teeth 66 / Temporary Teeth 17 } Total	83

(1) Number of Children who were :—

(*a*) Inspected by Dental Surgeons in *Bishop's Stortford, Buntingford, Berkhampstead, Royston and Tring.*

Routine Age Groups	1,562
Specials	243
Grand Total	1,805
(*b*) Found to require treatment	1,573
(*c*) Actually treated	770

	(*d*) Re-treated during the year as the result of periodical Examination			40
(2)	Half-days devoted to	Inspection 14 / Treatment 109	Total	123
(3)	Attendances made by children for treatment			1228
(4)	Fillings	Permanent Teeth 163 / Temporary Teeth 37	Total	200
(5)	Extractions	Permanent Teeth 340 / Temporary Teeth 1,553	Total	1,893
(6)	Administrations of general anæsthetics for extractions			312
(7)	Other operations.	Permanent Teeth 18 / Temporary Teeth 61	Total	79

(1) Number of Children who were :—

(*a*) Inspected by the Dentist at the *East Barnet, Harpenden, Welwyn and Welwyn Garden City Voluntary Dental Clinics.*

Routine Age Groups	985
Specials	332
Grand Total	1,317
(*b*) Found to require treatment	970
(*c*) Actually treated	973
(*d*) Re-treated during the year as the result of periodical Examination	91

(2)	Half-days devoted to	Inspection 7 / Treatment 104	Total	111
(3)	Attendances made by children for treatment			997
(4)	Fillings	Permanent Teeth 136 / Temporary Teeth 155	Total	291
(5)	Extractions	Permanent Teeth 280 / Temporary Teeth 1,641	Total	1,921
(6)	Administrations of general anæsthetics for extractions			588
(7)	Other Operations	Permanent Teeth 7 / Temporary Teeth 11	Total	18

1. Number of children who were :—

(*a*) Inspected by the Dentist at High Barnet.

Routine Age Groups	167
Specials	—
Total	167
(*b*) Found to require treatment	115

GROUP V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

(i) Average number of visits per school made during the year by the School Nurses	16
(ii) Total number of examinations of children in the Schools by the School Nurses (including examinations and re-examinations)	253,061
(iii) Number of individual children found unclean but not verminous	2,050
(iv) Number of individual children found verminous	437
(v) Number of times children have been cleansed and re-cleansed under arrangements made by the Local Education Authority	2,808
(vi) Number of cases in which legal proceedings were taken :—	
(*a*) Under the Education Act, 1921	*Nil*
(*b*) Under School Attendance Bye-laws	*Nil*